

WHAT IS CLAIMED IS:

1. An apparatus for forming a deposited film,
comprising:

a chamber capable of maintaining an interior
5 thereof under vacuum;

a source gas supply piping for supplying a source
gas into the chamber;

an evacuation system piping for evacuating the
interior of the chamber; and

10 a gas supply piping for use in opening to
atmosphere, for supplying a gas for returning a
pressure within the chamber to atmospheric pressure,
wherein a plurality of shut-off valves are
provided in series between a gas source of the gas for
15 returning the pressure within the chamber to the
atmospheric pressure and the chamber, and wherein a
pressure gauge and/or an evacuating means are provided
between the plurality of shut-off valves.

20 2. The apparatus according to claim 1, wherein
the evacuating means is independent of an evacuating
means for evacuating the interior of the chamber.

25 3. The apparatus according to claim 1, wherein
the chamber is provided in plurality.

4. The apparatus according to claim 3, wherein

the gas supply piping for use in opening to atmosphere is diverged toward a plurality of chambers, and a manually-operated valve is provided midway in the diverged piping.

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5. The apparatus according to claim 1, further comprising a programmed means for automatically depositing a film.

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6. The apparatus according to claim 5, wherein the pressure gauge is a pressure gauge with an alarm contact.

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7. A method of forming a deposited film, comprising supplying a source gas into a chamber to form a deposited film on a substrate, and thereafter, introducing a gas for opening to atmosphere into the chamber to return a pressure within the chamber to atmospheric pressure,

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wherein a plurality of shut-off valves are provided in series between a gas source of the gas for returning the pressure within the chamber to the atmospheric pressure and the chamber; and

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wherein the plurality of shut-off valves are closed to perform film deposition while a source gas is being supplied into the chamber.

8. The method according to claim 7, wherein a pressure between the plurality of shut-off valves is reduced to perform film deposition.

5 9. The method according to claim 7, wherein a space between the plurality of shut-off valves is filled with a non-reactive gas to perform film deposition.